

ISOCHRONOUS SWITCHED FABRIC NETWORK

ABSTRACT OF THE DISCLOSURE

An isochronous switched fabric network is disclosed comprising a plurality of interconnected switched nodes forming multiple dimensions, each switched node comprising an upstream port and a downstream port for each dimension, each upstream and downstream port comprising an input port and an output port. A discovery facility discovers a depth of each dimension, and discovers resources within each switched node. An addressing facility assigns a matrix address to each switched node, a resource reservation facility reserves resources within each switched node to establish a path through the switched fabric network for transmitting an isochronous data stream, and a scheduling facility schedules isochronous data transmitted through the switched fabric network.